

- 1           1.    A method comprising:  
2                    exposing a semiconductor wafer to bidentate  
3   chelating ligands; and  
4                    removing metal complexes formed by those  
5   chelating ligands.
- 1           2.    The method of claim 1 wherein removing metal  
2   complexes includes volatilizing the metal complexes.
- 1           3.    The method of claim 1 wherein removing the metal  
2   complexes includes using supercritical carbon dioxide to  
3   remove said complexes.
- 1           4.    The method of claim 1 including removing said  
2   metal complexes as a vapor.
- 1           5.    The method of claim 1 wherein removing said metal  
2   complexes includes removing three bidentate chelating  
3   ligands per metal center.
- 1           6.    A method comprising:  
2                    exposing a semiconductor wafer to chelating  
3   ligands; and  
4                    removing a vapor including the chelating ligands  
5   and a metal center.

1           7.    The method of claim 6 wherein removing metal  
2 complexes includes volatilizing the metal complexes.

1           8.    The method of claim 6 wherein removing the metal  
2 complexes includes using supercritical carbon dioxide to  
3 remove said complexes.

1           9.    The method of claim 6 wherein removing said metal  
2 complexes includes removing three bidentate chelating  
3 ligands per metal center.

1           10.   The method of claim 6 including exposing said  
2 wafer to bidentate chelators.

1           11.   The method of claim 10 including exposing the  
2 wafer to bidentate O,O' chelators.

1           12.   The method of claim 10 including exposing said  
2 wafer to N,N' chelators.

1           13.   The method of claim 10 including exposing said  
2 wafer to P,P' chelators.

1           14.   A cleaning composition comprising:  
2                supercritical carbon dioxide; and  
3                bidentate chelating ligands.

1        15. The composition of claim 14 wherein said ligands  
2 are N,N' chelators.

1        16. The composition of claim 14 wherein said ligands  
2 include O,O' chelators.

1        17. The composition of claim 14 wherein said ligands  
2 include P,P' chelators.

1        18. A method comprising:  
2                volatilizing chelators; and  
3                exposing a semiconductor wafer to said  
4 volatilized chelators.

1        19. The method of claim 18 including volatilizing  
2 bidentate chelators.

1        20. The method of claim 18 including removing metal  
2 complexes formed by the chelators.